

A level Mathematics



Type of Qualification: A Level

Level of Course: 3

Aims of the course

In all new specifications for Mathematics, the emphasis is on providing a strong foundation for progress to further study. Importance is placed on representing situations mathematically, using models to investigate problems in context and being able to justify solutions. The enjoyment of tussling successfully with a complex mathematical problem cannot be underestimated.

Many of the topics studied in the course link to other subjects, such as forces in Physics, correlation in Geography and genetic probability in Biology.

The skills gained from this course are sought after for entry to a wide range of university courses, not just Mathematics or Accountancy. The Russell group universities feel that it is a sound basis for all their courses and look favourably on applicants with A level Maths. The analytical side of the subject is recognised as useful in many areas of employment too. It is a good stepping stone to the next life stage whatever you choose to do.

Course content

There are three main areas of study; core mathematics, mechanics and statistics. The core elements build on knowledge and skills gained at GCSE such as algebra, graphs and trigonometry. Topics from Mechanics include Newton's laws, friction and moments. In Statistics, work is based around a large data set, for example weather data from a number of weather stations. Diagrams, statistical tests, analyses and inferences are covered in the context of the data and there is an expectation that the statistical functions of both the calculator and spreadsheet software will be utilised effectively.

How is the course assessed?

This course is assessed only through written examinations. There are three exams, each of which is two hours long.